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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,427	12/31/2003	Paulo E.X. Silveira	2003-074-DSK	9568
7590	06/23/2005		EXAMINER	
Timothy R. Schulte Storage Technology Corporation One StorageTek Drive Louisville, CO 80028-4309			PAK, SUNG H	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	<i>PN</i>
	10/749,427	SILVEIRA ET AL.	
	Examiner	Art Unit	
	Sung H. Pak	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 26-52 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 11-25 is/are rejected.
- 7) Claim(s) 22 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 May 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5132004.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, drawn to a power management apparatus, classified in class 385, subclass 48.
- II. Claims 11-25, drawn to a method for distributing optical power, classified in class 398, subclass 15.
- III. Claims 26-30, drawn to a method of monitoring the use of optical power sources, classified in class 398, subclass 25.
- IV. Claims 31-40, drawn to a computer program product, classified in class 398, subclass 25.
- V. Claims 41-52, drawn to an optical power distribution apparatus, classified in class 385, subclass 48.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product, such as process that does not require steps of

retrieving a priority signal, wherein the priority signal indicates any change in priority ranking for plurality of optical devices.

Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Inventions Group I and Group III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper.

Inventions Group I and Group IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group IV, restriction for examination purposes as indicated is proper.

Inventions Group V and Group I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the optical power distribution apparatus claimed does not require the specifics of optical power management apparatus as claimed in claim 1. The subcombination has separate utility such as power monitor for optical fiber amplifiers.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group V, restriction for examination purposes as indicated is proper.

Inventions Group II, Group III, Group IV and Group V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects.

Because these inventions are distinct for the reasons given above and the search required for one Group is not required for any other Group, restriction for examination purposes as indicated is proper.

During a telephone conversation with Timothy Shulte on 6/8/2005 a provisional election was made with traverse to prosecute the invention of Group II, claims 11-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-10, 26-52 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Information Disclosure Statement***

Information disclosure statement filed 5/13/2004 has been considered.

***Drawings***

The drawings were received on 5/13/2004. These drawings are acceptable.

***Claim Objections***

Claim 22 is objected to because of the following informalities: the claim recites “a plurality of data devices” however “plurality of optical data devices” had been recited in the independent claim 11. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-15, 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (US 6,897,424 B2).

Suzuki discloses an optical device with all the limitations set forth in the claims, including: a method for distribution optical power to a plurality of optical data devices (i.e. “information processing apparatuses”: column 1 lines 19-24), the method comprising the steps of: retrieving a priority signal, said priority signal associated with a priority ranking for the plurality of optical data devices, determining if the priority signal indicates a change in the priority ranking for the plurality of optical data devices; wherein such steps comprising retrieving a plurality of optical power monitor signals (Fig. 1; column 2 line 60- column 3 line 10), said plurality of optical power monitor signals associated with a plurality of power levels of a plurality of power sources (Fig. 1); determining if said plurality of optical power output

monitor signals indicates a defect in at least one optical power source of said plurality of optical power sources; and redistributing optical power to said plurality of optical data devices (column 2 lines 4-15);

wherein the redistribution of optical power and replacement of faulty power source may be carried out without system down time (column 2 lines 20-41);

wherein said optical power comprises laser power (title);

wherein the laser power is from continuous wave laser (column 1 lines 19-30);

wherein the plurality of data devices comprises plurality of optical data management devices (i.e. "information processing apparatuses", column 1 lines 19-24).

Claims 11, 16-19, 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Al-Salameh et al (US 6,721,502 B1).

Al-Salameh discloses an optical device with all the limitations set forth in the claims, including: a method for distribution optical power to a plurality of optical data devices (i.e. "optical nodes" Fig. 1; abstract), the method comprising the steps of: retrieving a priority signal, said priority signal associated with a priority ranking for the plurality of optical data devices, determining if the priority signal indicates a change in the priority ranking for the plurality of optical data devices; wherein such steps comprising retrieving a plurality of optical power monitor signals (Figs. 2-3; column 3 line 19- column 4 line 10), said plurality of optical power monitor signals associated with a plurality of power levels of a plurality of power sources (column 5 lines 24-50); determining if said plurality of optical power output monitor signals indicates a defect in at least one optical power source of said plurality of optical power sources;

and redistributing optical power to said plurality of optical data devices (column 5 lines 24-50); determining if said plurality of power monitor signals indicate difference in power coupling ratio and redistributing optical power to compensate for difference in power coupling ration (column 5 lines 24-50);

wherein the redistribution of optical power and replacement of faulty power source may be carried out without system down time (column 5 lines 3-23);

wherein the redistributing steps is performed by an optical power switch and optical power coupler unit (Fig. 3).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yang (US 6,194,707 B1) and Passier et al (US 2004/0047628 A1) disclose optical power redistribution devices and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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